

**UNITED STATES
DEPARTMENT OF THE INTERIOR**

Minerals Management Service

HANDBOOK

**AUTOMATED
EXTERNAL
DEFIBRILLATOR
PROGRAM**

(485.6-H)

FORWORD

The Minerals Management Service (MMS) Handbook has been developed to provide guidelines for implementing training procedures and reporting requirements for the Automated External Defibrillator (AED) Program. Any questions regarding this Program or how to volunteer as a Lay Responder should be directed to the MMS Safety Manager.

/s/

R. M. "Johnnie" Burton
Director

Date: March 26, 2004

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CHAPTER 1. GENERAL INFORMATION

1. Scope.

A. This Handbook provides criteria for developing a cadre of trained volunteers who are competent in Cardiopulmonary Resuscitation (CPR) and the use of an Automated External Defibrillator (AED). It establishes training and certification requirements for these volunteers. It also provides procedures for program implementation, AED procurement, and AED use at MMS facilities.

B. The AED Program implementation and oversight shall be a collaborative effort among the Designated Official, the Program Administrator, the Bureau Safety Manager, the Medical Director, and the Lay Responders. This Program shall conform to the American Heart Association guidelines. The service provided is intended for sudden cardiac arrest or for situations in which any reasonable person would be concerned about cardiac arrest, inclusive of a situation in which an individual collapses and is unresponsive. The service should be provided to all potential cardiac arrest victims unless valid documentation is presented indicating a Do Not Attempt Resuscitation (DNAR) request. Employees will be informed of the DNAR option.

2. Responsibilities. See MMSM 485.6.5.

3. Emergency Response Plan.

A. A site specific emergency response plan must be developed that identifies the system in which Lay Responders are immediately notified of the need for an AED. This plan must be annually reviewed and updated.

B. All personnel shall be informed of the AEDs in their facility and AED response team activation procedures. The same information shall be communicated to new or transferred personnel. This may be part of the new employee orientation.

CHAPTER 2. PROGRAM IMPLEMENTATION

1. Procedures.

A. Determining the need for an AED Program and the required number of AEDs.

(1) All MMS facilities may have an AED Program. The Designated Official shall decide whether or not to implement a program. This decision should be made with input from personnel at the site, community EMS response personnel, and AED training consultants. If the Designated Official is considering implementing an AED Program, they should notify the Bureau Safety Manager and request a site evaluation.

(2) The BSM shall conduct a site evaluation to determine the number of AEDs required, potential AED locations, number of Lay Responders required, and AED manufacturer and model. The BSM shall send the completed evaluation to the Designated Official.

(3) After receiving the BSM's evaluation, the Designated Official has 30 days to decide whether to have an AED Program. If the Designated Official decides to start a Program, they must submit an implementation timeline to the BSM within 30 days. (See Appendix A, AED Program Implementation Timeline.) If the Designated Official decides not to implement a Program, they must submit a declining statement to the BSM within 30 days. (See appendix B.)

B. AED Placement.

(1) The BSM will recommend areas where the AEDs should be placed. (See 1.A(2) above.) When determining the AED location(s), the BSM shall use the following criteria:

(a) Easy access to the AEDs (e.g., height, doors, stairways, security screening, or other obstructions).

(b) A location that is well marked, publicized, and known among trained staff.

(c) A nearby telephone to call for backup, security, or EMS to ensure additional help is dispatched.

(d) A location protected by secured access doors that will decrease pilferage or AED misuse that would compromise the Program.

- (e) A location that is easily accessible to Device Inspectors so they can conduct their daily inspections.
 - (f) A location that permits a 3-minute or less travel time. This interval begins from the moment a person is identified as needing emergency care to when the AED is at the victim's side. Verify accuracy of travel time. If travel time exceeds 3 minutes, either additional AEDs should be procured or the AED should be relocated.
 - (g) A location that allows other personnel to see and/or hear a "locally alarmed" AED cabinet. This enables other personnel to request additional help.
- (2) Each AED must be stored in a wall mounted cabinet with either a local alarm or remote alarm. All AED storage cabinets shall be mounted in a fixed location that complies with local building codes and Americans with Disabilities Act requirements. The equipment should be stored so that AED removal will automatically notify security, EMS, or a central control center.

C. Selection of AED type, manufacturer, and accessories.

- (1) Only FDA approved commercially available AEDs shall be purchased.
- (2) All AEDs must be biphasic (e.g., capable of delivering a second reverse shock to the victim immediately after the initial shock).
- (3) Program Administrators should follow the BSM's recommendation for the number of AEDs. If an alternate choice is made, Program Administrators shall provide the BSM with documentation explaining the deviation.
- (4) The following accessories must be colocated with the AED:
 - (a) Two sets of defibrillator chest pads.
 - (b) Two pairs of nonlatex protective gloves.
 - (c) Two CPR face masks with one-way valves (or other type of barrier device that can be used in mouth-to-mouth resuscitation).
 - (d) One disposable razor.
 - (e) One extra battery.

- (f) Scissors.
- (g) Notepad and pencil.
- (h) One large cloth/gauze dressing.
- (i) Simplified CPR and AED directions.
- (j) Two biohazard or medical waste plastic bags for waste or AED transport, should the device contact any bodily fluids.
- (k) One cleansing towel.
- (l) One extra data card to record event data.

D. Purchase of AEDs

- (1) The AEDs must be purchased from the manufacturer or authorized dealer according to Federal procurement guidelines. A maintenance and equipment servicing plan shall be purchased if it is available. The Program Administrators shall inspect and test all AEDs, wall cabinets, and accessories before installation. Contractors must certify that equipment and installation meet the manufacturer's guidelines.
- (2) Federal law (21 CFR 801.109) restricts the sale of AEDs without a physician's prescription. Most AED manufacturers, authorized dealers, and Federal agencies that provide AED programs offer the services of a licensed physician. The physician writes the AED prescription and oversees the Program as the Medical Director. This option should be used if it is available. If this option is not available, a local physician shall perform the duties of the Medical Director.

AED PROGRAM IMPLEMENTATION TIMELINE

Implementation Steps	Anticipated date of completion	Actual date of completion
Request AED site evaluation from Bureau Safety Manager.		
Receive evaluation from Bureau Safety Manager.		
Accept/Decline AED Program. Notify Bureau Safety Manager of intentions.		
Identify Program Administrator.		
Select AED manufacturer and model.		
Notify local EMS of AED Program.		
Develop AED Program cost estimate and obtain funding.		
Purchase AED devices.		
Create Lay Responders' emergency response protocol.		
Identify training agency.		
Obtain Medical Director approval.		
Identify device inspectors.		
Identify location of AEDs.		
Identify Lay Responders.		
Create/identify filing system.		
Complete CPR/AED training.		
Install AEDs.		
Notify all personnel of AED Program.		
Implement AED Program.		

DECLINATION STATEMENT FOR IMPLEMENTING AED PROGRAM

Date:

Minerals Management Service
Department of the Interior
Bureau Safety Manager
381 Elden Street
Herndon, Virginia 20170

To Whom It May Concern:

This is to inform you that we will not implement a Public Access Defibrillation Program at this time at:

Office or facility:

Address:

I have made this decision after reviewing the MMS Automated External Defibrillator Directive and Handbook and the Bureau Safety Manager's site evaluation.

Sincerely,

Designated Official

CHAPTER 3. TRAINING

1. Training/Certification/Retraining for Lay Responders.

A. All Lay Responders must be certified by a nationally recognized agency that offers training according to Emergency Cardiovascular Care (ECC) guidelines. This training must include Adult CPR, situation assessment, AED use (including AED accessories), hands-on evaluations, and a written evaluation. Training programs must also be listed as a collaborating organization in the current ECC Circulation® publication of the American Heart Association. These programs include the American Heart Association (AHA), the American Red Cross (ARC), the American Safety Health Institute (ASHI), and the National Safety Council (NSC). In addition, Program Administrators should conduct quarterly practice sessions so that Lay Responders can maintain their skills and rehearse protocols. These practice sessions do not recertify Lay Responders.

B. Training may be scheduled locally or coordinated through the Bureau Safety Manager.

C. Certification expiration dates will follow local protocol. All Lay Responders shall renew their AED certification every 1 or 2 years as required by the training agency (ASHI, AHA, ARC, NSC). Periodic practice sessions and annual recertification classes are recommended to ensure Lay Responders' proficiency.

D. All Lay Responders should have annual bloodborne pathogen training (29 CFR 1910.1030).

E. Oxygen delivery training is not required for Lay Responders.

2. Use of AEDs at MMS Facilities by Certified Responders Only.

A. An AED should be used on an unresponsive victim who has no signs of circulation (breathing, movement, coughing, normal skin appearance). A pulse check is not required to check for circulation. However, if a pulse check is completed, the check should never last more than 10 seconds.

B. Once cardiac arrest is confirmed (no signs of circulation) and an AED arrives, the following steps should be taken to use the AED. (See also chapter 3, appendix A.)

- (1) Turn on the AED.
- (2) Identify the Lay Responders and assess the current situation.
- (3) Remove the following items from the chest area:

- (a) Clothing.
- (b) Chest hair (dry shave with a disposable safety razor).
- (c) Medication patches (protective gloves *must* be worn).
- (d) Jewelry.
- (4) Ensure that the bare chest is dry.
- (5) Attach one pad on the victim's right upper chest next to the sternum.
- (6) Attach one pad on the victim's left side below the nipple line.
- (7) Plug in electrode cable (if required).
- (8) Make sure that no one is touching the victim and that there is no movement.
- (9) Analyze the victim's heart rhythm with the AED.
- (10) If a shock is indicated, the AED will charge and prompt the Lay Responder to shock the victim. Make sure all bystanders are clear and press the shock button.
- (11) If no shock is indicated, reassess circulation and perform 1 minute of CPR, or until prompted by the AED to stop.
- (12) Repeat steps 10–11 for no more than 3 shocks. After 3 shocks, or after any "no shock indicated," reassess circulation. If there is no sign of circulation, perform 1 minute of CPR, or until prompted by the AED to stop.
- (13) Follow AED instructions until EMS arrives. At any time the scene becomes unsafe, "life safety" takes precedence and the Lay Responders should immediately leave the area. If possible, the victim should be removed from the area if it does not compromise the Lay Responders' safety.

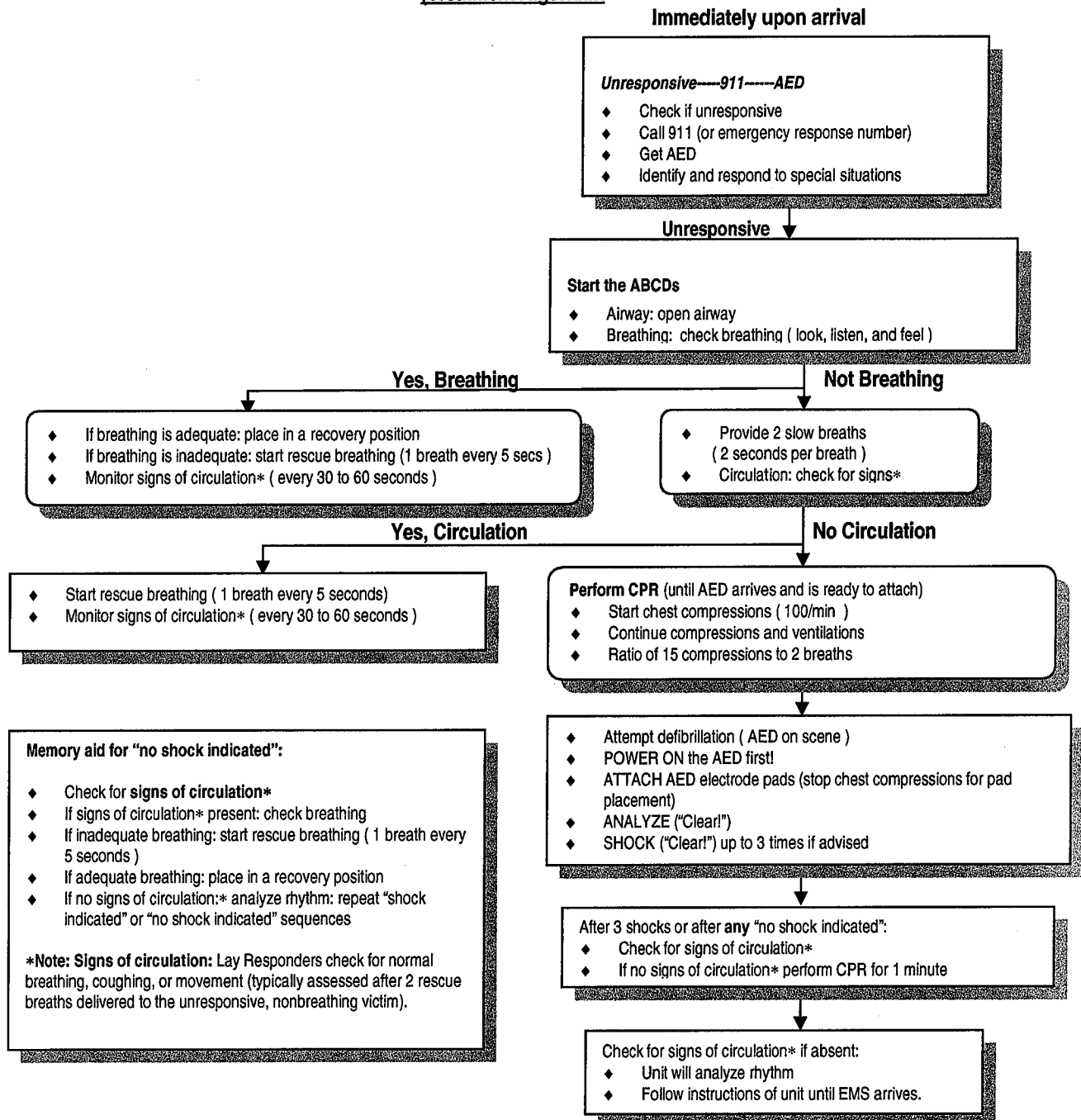
C. The AED must not be used when any of the following conditions exist:

- (1) The victim is responsive or shows signs of circulation.
- (2) Volatile liquids; e.g., gasoline, gases, or propane are present.
- (3) The victim is less than 8 years old or weighs less than 55 pounds.

D. Do Not Attempt Resuscitation Request.

- (1) A Lay Responder may encounter a cardiac arrest victim who has previously expressed a wish to forego resuscitation attempts if cardiac arrest occurs. Lay Responders shall honor a Do Not Attempt Resuscitation (DNAR) request if the victim is wearing a DNAR Medic Alert bracelet or necklace.
- (2) If a Lay Responder finds an apparent cardiac arrest victim and the above stated DNAR requirement is met, the Lay Responder shall respect the victim's wishes. A Lay Responder or a witness shall call EMS and report the problem as a "collapsed, unresponsive victim who has documented a no-CPR request." The Lay Responder shall remain with the victim and await EMS personnel arrival.
- (3) If it is undocumented or unclear whether the victim has a valid DNAR request, the Lay Responders shall proceed with assessment, CPR, and AED use as indicated by the victim's condition. The EMS professionals and hospital personnel will make any further determinations.

Automated External Defibrillation (AED)
(Treatment Algorithm)



Note: This appendix does not replace the training program.

CHAPTER 4. REPORTING PROCEDURES AND RECORDKEEPING

1. Reporting Procedures.

A. After using an AED, Lay Responders must complete an AED Use Report. (See appendix A.) All Lay Responders on the scene should help collect and record the information. The primary Lay Responder(s) who performed CPR and used the AED shall sign the report and forward it to the Program Administrator.

B. The Program Administrator shall retain the original AED Use Report and forward copies to the Medical Director, the Designated Official, and the Bureau Safety Manager within 24 hours.

2. Inspections.

A. The Device Inspectors must complete daily AED inspections on normal workdays (e.g., Monday–Friday). This excludes Federal holidays and days with excused absences. (See MMSM 370.630.6.) The specific inspection will be determined by the manufacturer's guidelines. All inspections will include at a minimum a daily inspection for visible obstructions and verification that the status light is showing an operable system.

B. The Device Inspectors must conduct monthly inventories and inspections of all AED accessories. Inspections may be logged in a file maintained by the Program Administrator or on an inspection tag attached to the AED cabinet. If the inspection records are not with the AED cabinet, their location must be displayed in the AED cabinet.

3. Recordkeeping/Auditing.

A. The Program Administrator shall perform an audit every other month verifying that the inspections are being completed. The Program Administrator must keep a written or electronic log of the audits. Electronic logs must be available in a shared computer directory. The Program Administrators shall keep the following records:

(1) Original "daily" inspection sheets.

(2) All AED-related training logs containing instructors' names, trainees' names, training class dates, practice session dates, and certification dates, which include expiration dates and certifying agency (e.g., AHA, ARC, ASHI, NSC).

(3) A current list of AED responders. This list should match the Occupant Emergency Plan or be referenced in the procedure.

- (4) Original AED Use Reports.
- (5) Copy of the maintenance contract which includes contact information.
- (6) Records of all annual inspections by the manufacturer or authorized dealer.
- (7) Records of all AED locations, service, and updates.
- (8) Records of AED implementation medical reviews.

B. The Bureau Safety Manager must:

- (1) Complete an annual recordkeeping audit for each AED device.
- (2) Conduct an annual review of this policy to ensure that it is current with MMS policies and ECC guidelines.
- (3) Keep copies of all records as well as the annual recordkeeping audit.

C. The Medical Director will provide to the Program Administrator:

- (1) Certification that the Medical Director is licensed to practice in the appropriate state.
- (2) Documentation showing that the Medical Director is board certified.

D. The CPR/AED trainer will provide to the Program Administrator:

- (1) Applicable trainer certifications (Advance Cardiac Life Support, ARC, ASHI, AHA, NSC).
- (2) Certificates indicating successful completion of the specified course per ECC guidelines.

AED USE REPORT***CONFIDENTIAL WHEN COMPLETED*****MINERALS MANAGEMENT SERVICE AED REPORT FOR CARDIAC ARRESTS**

To be completed anytime an AED device is turned on.

Form shall be filled out by the Lay Responders who provided care and returned to the site Program Administrator within 24 hours.

The Program Administrator will forward copies to the Medical Director, Designated Official, and Bureau Safety Manager.

1. Organization name: _____

2. Incident location (e.g., office location): _____

Street address: _____

3. Date of incident: ____/____/____ (MM/DD/YYYY)

4. Estimated time of incident : ____:____ a.m. / p.m.

4a. Estimated time that 911 call was placed: ____:____ a.m. / p.m.

5. Name of victim (*First MI Last* if known): _____

6. Victim gender: Male ☐ Female ☐

7. Estimated age of victim: _____ Yrs.

8. Did the victim collapse (become unresponsive)? Yes ☐ No ☐

8a. If yes, what were the events immediately prior to the collapse? (Check all that apply.):

Difficulty breathing ☐ Chest pain ☐ No signs or symptoms ☐

Electrical shock ☐ Injury ☐ Unknown ☐

8b. Was someone present to see the victim collapse? Yes ☐ No ☐

If yes, was that person a Lay Responder? Yes ☐ No ☐

8c. After the collapse, at the time of victim assessment and just prior to the facility AED pads being applied,

Was the victim breathing? Yes ☐ No ☐

Did the victim have a pulse? Yes ☐ No ☐

9. Was CPR given prior to the EMS arrival? Yes ☐ Go to 9a. No ☐ Go to 10.

9a. Estimated time CPR Started: ____:____ a.m. / p.m.

9b. Was CPR started prior to the arrival of a Lay Responder? Yes ☐ No ☐

9c. Who started CPR? Bystander ☐ Lay Responder ☐

10. Was a facility AED brought to the victim's side prior to the EMS arrival? Yes ☐ No ☐

10a. If no, briefly describe why and skip to question 17: _____

10b. If yes, estimated time (based on your watch) facility AED at victim's side: ____:____ a.m. / p.m.

CONFIDENTIAL WHEN COMPLETED

Organization name: _____

11. Were the facility AED pads put on the victim? Yes ☐ No ☐12. Was the facility AED turned on? Yes ☐ No ☐

12a. If yes, estimated time (based on your watch) facility AED was turned on: _____:_____ a.m. /p.m.

13. Did the facility AED ever shock the victim? Yes ☐ Go to 13a. No ☐ Go to 14.

13a. Estimated time (based on your watch) of first shock by facility AED: _____:_____ a.m. / p.m.

13b. If shocks were given, how many shocks were delivered prior to the EMS ambulance arrival? # _____

14. Name of person operating the facility AED: _____

1a. Is this person a Lay Responder? Yes ☐ No ☐

14b. Highest level of medical training of person administering the facility AED:

Public AED trained ☐ Lay Responder AED trained ☐ EMT-B ☐ CRT/EMT-P ☐
Nurse/Physician ☐ Other health care provider ☐ No known training ☐15. Was there any mechanical difficulty or failure associated with the use of the facility AED? Yes ☐ No ☐15a. If yes, briefly explain and attach a copy of the completed FDA reporting Form 3500A (required by Federal law). _____

_____16. Were there any unexpected events or injuries that occurred during the use of the facility AED? Yes ☐ No ☐16a. If yes, briefly explain: _____

17. Indicate the victim's status at the time of the EMS arrival: (Hr. Min.)

17a. Pulse restored: Yes ☐ No ☐ Don't know ☐ If yes, time pulse restored: _____:_____ a.m./p.m.17b. Breathing restored: Yes ☐ No ☐ Don't know ☐ If yes, time breathing restored: _____:_____ a.m./p.m.17c. Responsiveness restored: Yes ☐ No ☐ Don't know ☐ If yes, time victim responsive: _____:_____ a.m./p.m.18. Was the victim transported to the hospital? Yes ☐ No ☐18a. If yes, how was the victim transported? EMS ambulance ☐ Private vehicle ☐ Other _____

Report completed by:

Print Name / Date _____ Print Name / Date _____

Signature _____ Signature _____

Title / Office Phone _____ Title / Office Phone _____

Make/model of the facility AED that was used?

Manufacturer make model #: _____